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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/072,002	02/12/2002	Klaus Wildenhain	3633-511	2442

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ALEXANDRIA, VA 22314

EXAMINER
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HORTON, YVONNE MICHELE

ART UNIT	PAPER NUMBER
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3635

DATE MAILED: 06/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/072,002

**Applicant(s)**

WILDENHAIN ET AL.

**Examiner**

Yvonne M. Horton

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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## **DETAILED ACTION**

### ***Claim Objections***

Claims 1-19 are objected to because of the following informalities: Claims 1 and 17 are directed to a fixing – a subcombination. However, later claims attempt to include the main glazing and additional pane - a part of the combination. As such, the claims do not positively cite the main glazing or the additional pane or any other structure associated therewith. Until further clarification, the claims have been examined as the fixing in combination with the main glazing and the additional pane. Also, in claim 4, it is not clear what is meant by “at least indirectly”. Claim 6 contains an improper Markush grouping. The claim should be amended to read --a retaining element consisting of a ring, disk, ring segment, or disk segment--. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1, 17 and 20, the last three lines of each claim, render the claims as being indefinite because the claims require a desired result without the structure to attain the desired result. For instance, the claim does not define “how” the “configuration” of the retaining element permits the first and additional panes to be positioned. Further, as noted above, the claim has been examined as a

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sub-combination claim – to the fixing. The first and additional elements would need to be positively cited in order to be given patentable weight.

In claim 5, again, the additional pane is not a positive part of the claim limitations and have not been given patentable weight. This same problem appears in later claims. Please review the claims for 35 USC 112 accuracy.

Regarding claim 6, it is not clear where the “ring” is disposed in relation to the structure.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

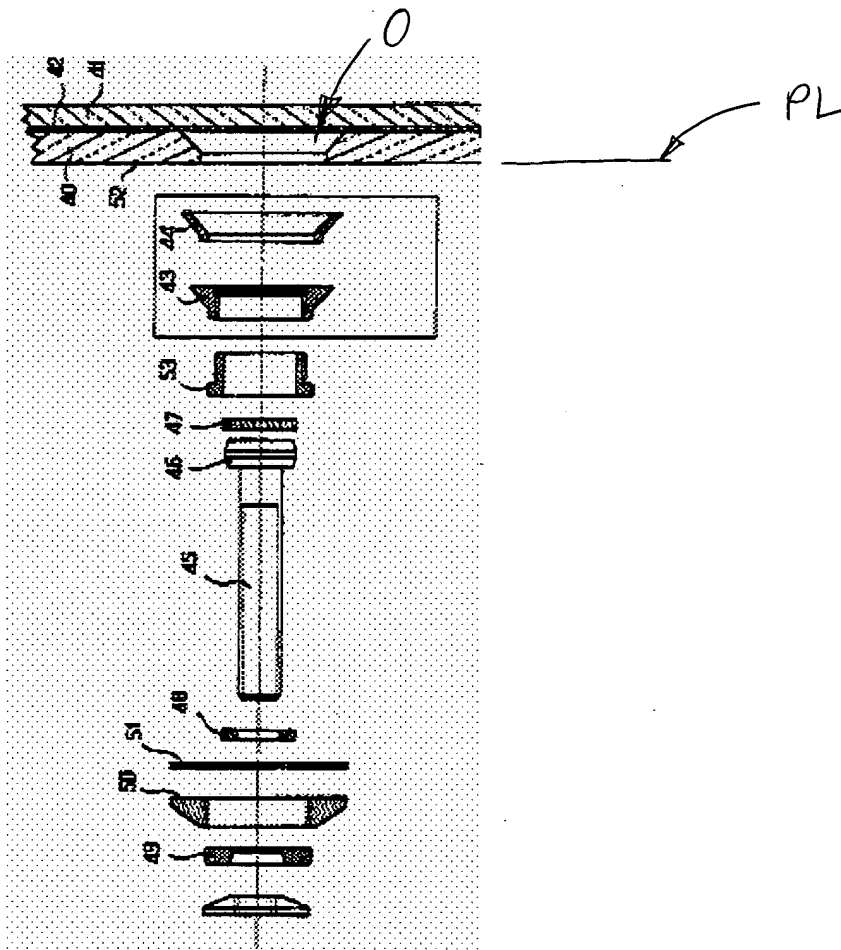
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7,9,11,12,16-19,33 and 34 are rejected, as best understood, under 35 U.S.C. 102(b) as being anticipated by US Patent #5,540,514 to DEMARS et al. Regarding claims 1 and 17, DEMARS et al. discloses a fixing member including at least one support (31,25,28) and (45,46) fixed to a main glazing (19,41) and at least one retaining/safety element (50)/(23) such that the retaining element (50)/(23) is “configured and dimensioned” to permit an additional pane (18,40) to be disposed in a first position, when the additional pane (40) is bonded to the main glazing (41) as shown in figure 6, proximate the main glazing (19,41) and a second supported position different than the first position that is spaced from the first position, when the support (45,46) is rotated

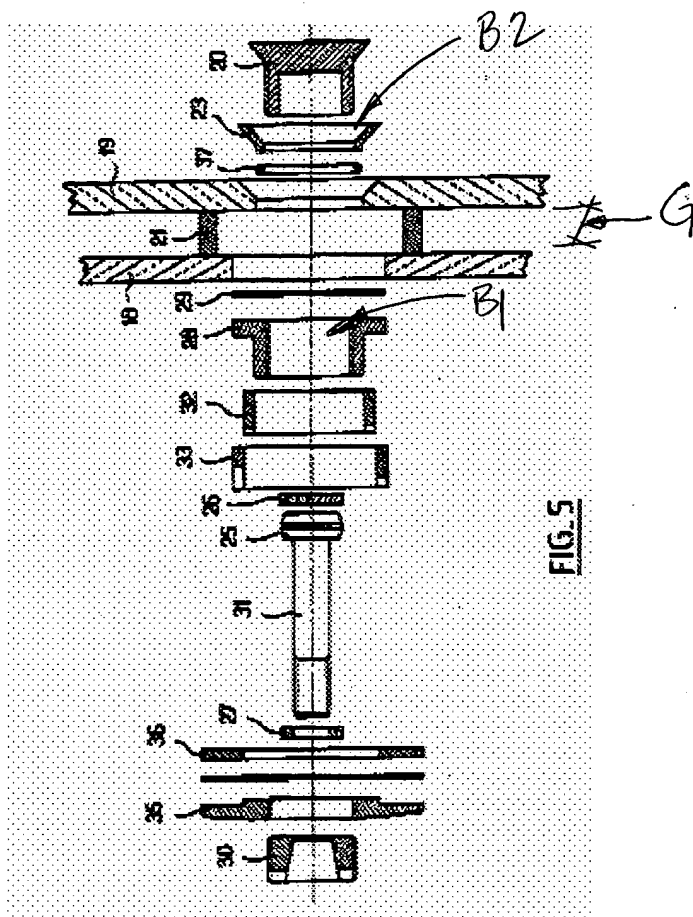
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and the main glazing (41) is spaced from the additional pane (40). In reference to claim 2, the at least one support (45,46) "fixes" the main glazing (41) to the additional pane (40) by positive engagement of the retaining element (50) with component (53) which in turn engages the support (45,46). Regarding claim 3, as mentioned earlier, the first position is shown in figure 6; wherein, the main glazing (41) is bonded to the additional pane (40). In reference to claim 4, the retaining element (50) is "at least indirectly" fixed to the main glazing (40). In reference to claim 5, the additional pane (40) has at least one opening (O) that receives the support (45,46) of the retaining element (50) therethrough, see the marked figure below. Regarding claim 6, the at least one opening (O) is a through-bore and the at least one retaining element (50) is a ring and has an outside diameter larger than the through-bore, see figure 6. In reference to claim 7, the additional pane (40) defines a first plane (PL), see the below marked figure; wherein, the support (45,46) intersects the first plane (PL) and the retaining element (50) is fixed to the support (45,46). Regarding claim 9,11 and 12, DEMARS et al. discloses in column 2, lines 36-38, that his elements can be monolithic/multiple and laminated glass. In reference to 16, an intermediate gap (G) is formed between the main glazing (19) and the intermediate pane (18) when the additional pane (40) is in the supported (pre-assembled and post-assembled) position, see the marked figure below. In reference to claims 18 and 19, the safety element (23) is coupled to the support (28) and with a fastener (20) that is received in the bores (B1,B2) in the support (28) and retainer/safety

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element (23). Regarding claims 33 and 34, the retaining/safety element (50)/(23) is configured and dimensioned to permit the additional pane (40) to be positioned in the first position, when the additional pane (40) is bonded to the main glazing (41) as shown in figure 6, proximate the glazed element (41) and the second supported position spaced from the first position, between the glazed element (41) and the retaining element (50)/(23), when the support (45,46) is rotated and the main glazing (41) is spaced from the additional pane (40).



### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 8,10 and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent #5,540,514 to DEMARS et al. DEMARS et al. discloses the basic claimed fixing and glazing combination except for explicitly detailing that the main glazing/additional pane is pre-stressed/partially pre-stressed, a heat-reflective coating, or oblique/roof glazing. Regarding the particular types of materials used to form the main/additional members, it would have been obvious to one having ordinary skill in the art at the time the invention was made to select a known material on the basis of its suitability for the use intended as an obvious matter of design choice. For instance, if the assembly is intended to be used in an environment prone to being exposed to excessive heat, perhaps a glass assembly having a heat reflective coating would be appropriate. On the other hand, if the glazing is intended to be employed in an environment exposed to excessive external forces such as winds and earthquakes, perhaps a pre-stressed glazing would be appropriate.

Claims 20-32 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent #5,540,514 to DEMARS et al. Regarding claims 20, 31 and 32,



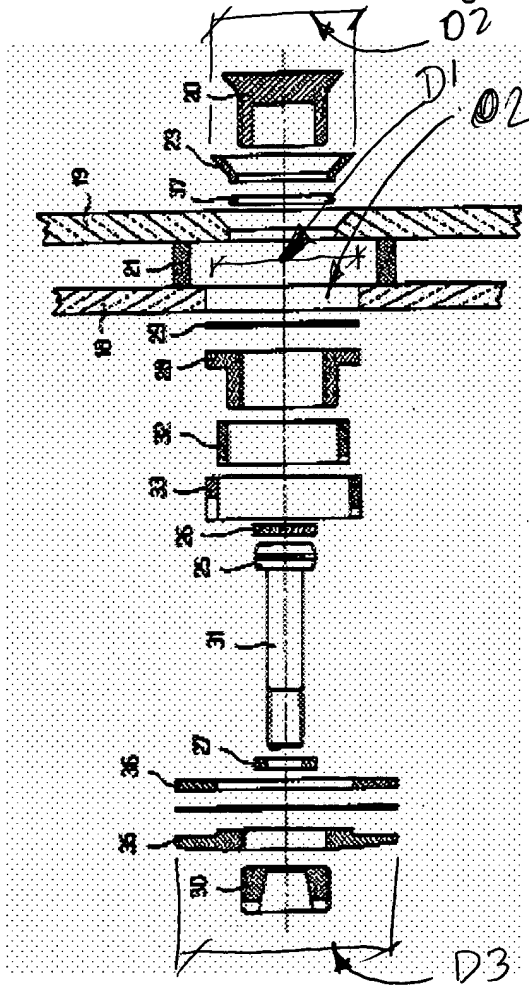
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DEMARS et al. discloses a fixing member including at least one support (31,25,28) and (45,46) fixed to a main glazing (19,41) and at least one retaining/safety element (50)/(23) such that the retaining/safety element (50)/(23,35) is "configured and dimensioned" to permit an additional/second pane (18,40) to be disposed in a first position, when the additional pane (40) is bonded to the main glazing (41) as shown in figure 6, proximate the main glazing (19,41) and a second supported position different than the first position that is spaced from the first position, when the support (45,46) is rotated and the main glazing (19,41) is spaced from the additional pane (18,40). In reference to claim 21, the additional pane (40) has at least one opening (O) that receives the support (45,46) of the retaining element (50) therethrough, see the marked figure above. Regarding claims 22 and 27, as mentioned earlier, the first position is shown in figure 6; wherein, the main glazing (41) is bonded to the additional pane (40). In reference to claim 23, the retaining/safety element (50)/(23) includes a first portion (23) sealed to the first glass/main glazing (19) and a second portion (35) remote from the first/main glazing (41). Regarding claims 24 and 25, the additional/second pane (18,40) has bore (O2) with an inner diameter (D1), see the marked attachment below, such that the outer diameter (D2) of the first portion (23) is larger than the inner bore diameter (D1), and the second portion (35) has a second outer diameter (D3) such that the inner diameter (D1) is smaller than the second outer diameter (D3). In reference to claims 26-28, DEMARS et al. discloses in column 2, lines 36-38, that his elements can be

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monolithic/multiple and laminated glass. Regarding claim 29, DEMARS et al.

discloses the basic claimed fixing and glazing combination except for



explicitly detailing that the main glazing/additional pane is pre-stressed/partially pre-stressed. Regarding the particular types of materials used to form the main/additional members, it would have been obvious to one having ordinary skill in the art at the time the invention was made to select a known material on the basis of its suitability for the use intended as an obvious matter of design choice. For instance, if the assembly is intended to be used in an environment prone to being exposed to excessive heat, perhaps a glass assembly having a heat reflective coating would be appropriate. On the other hand, if the glazing is

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intended to be employed in an environment exposed to excessive external forces such as winds and earthquakes, perhaps a pre-stressed glazing would be appropriate. In reference to claim 30, the first sheet/glazing element (41) is separated from the support (45,46) by a seal (43). Regarding claim 35 is, the retaining/safety element (50)/(23) is configured and dimensioned to permit the additional pane (40) to be positioned in the first position, when the additional pane (40) is bonded to the main glazing (41) as shown in figure 6, proximate the glazed element (41) and the second supported position spaced from the first position, between the glazed element (41) and the retaining element (50)/(23), when the support (45,46) is rotated and the main glazing (41) is spaced from the additional pane (40).


### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yvonne M. Horton whose telephone number is (571) 272-6845. The examiner can normally be reached on 6:30 am - 3:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl D. Friedman can be reached on (571) 272-6842. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Yvonne M. Horton  
Examiner  
Art Unit 3635  
6/17/05